

<b>FORM PTO-1449</b>  <b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION PURSUANT TO 37 CFR §1.97 &amp; 1.98</b>	Docket Number:	Serial Number:
	4015-5090	101672127
	Applicant:	
	Bottomley, et al.	
Filing Date:		Group:

U. S. PATENT DOCUMENTS

Examiner					Filing Date		
Initial		Patent No.	Date	Name	Class	Subcl	If Approp.
/CO/	A	6,363,104	2002	Bottomley			

FOREIGN PATENT DOCUMENTS

					Translation		
		Patent No.	Date	Name	Class	Subcl	Yes No
/CO/	B	WO 00/70836	2000	Ling et al.			

OTHER DOCUMENTS (including author, title, date, pages, etc.)

/CO/	C	Publ. No. US 2002/0150176 A1; Oct. 17, 2002; Chevalier, et al.; Method and Device for the Estimation of a Propagation Channel From Its Statistics;
/CO/	D	F. Ling; Optimal Reception, Performance Bound, and Cutoff Rate Analysis of Reference Assisted Coherent CDMA Communications with Applications; IEEE Trans. Commun., vol. 47; pgs. 1583-1592, Oct. 1999.
/CO/	E	K. Kettunen; Enhanced Maximal Ratio Combining Scheme for RAKE Receivers in WCDMA Mobile Terminals; electronic letters; vol. 37, no. 8; pgs. 522-524; April 12, 2001.
/CO/	F	J. Choi; Pilot Channel-Aided Techniques to Compute the Beamforming Vector for CDMA Systems with Antenna Array; IEEE Trans. Veh. Technol.; vol. 49, pgs. 1760-1775, Sept. 2000.
/CO/	G	J.C. Guey, M.P. Fitz, M.R. Bell, and W.Y. Kuo; Signal Design for Transmitter Diversity Wireless Communication Systems over Rayleigh Fading Channels; IEEE Trans. Commun.; vol. 47; pgs. 527-537; April 1999.
/CO/	H	W.Y. Kuo and M.P. Fitz; Design and Analysis of Transmitter Diversity Using International Frequency Offset for Wireless Communications; IEEE Trans. Veh. Technol.; vol. 46; pgs. 871-881; Nov. 1997.
/CO/	I	G.E. Bottomley, T. Ottosson, and Y.P.E. Wang; A Generalized RAKE Receiver for Interference Suppression; IEEE J. Sel. Areas Commun.; vol. 18; pgs. 1536-1545 Aug. 2000.
/CO/	J	R. Price and P.E. Green, Jr.; A Communication Technique For Multipath Channels; Proc. IRE, vol. 46; pgs. 555-570; Mar. 1958.
/CO/	K	G.L. Turin; Introduction to Antimultipath Techniques and Their Application to Urban Digital Radio; Proc. IEEE, vol. 68; pgs. 328-353; March 1980.
/CO/	L	G.E. Bottomley, E. Sourour, R. Ramesh, and S. Chennakeshu; Optimizing the Performance of Limited Complexity RAKE Receivers; Proc. 48 <sup>th</sup> IEEE Veh. Technol. Conf.; Ottawa, Canada, May 18-21, 1998.

FORM PTO-1449

**INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION PURSUANT TO  
37 CFR §1.97 & 1.98**

Docket Number:

4015-5090

Serial Number:

10/672/27

Applicant:

Bottomley, et al.

Filing Date:

Group:

**OTHER DOCUMENTS (Cont'd)** (including author, title, date, pages, etc.)

/CO/ | M | K.J. Kim, S.Y. Kwon, E.K. Hong, and K.C. Whang; Effect of Tap Spacing on the  
| | Performance of Direct-Sequence Spread-Spectrum RAKE Receiver; IEEE Trans  
| | Commun.; vol. 48; pgs. 1029-1036; June 2000.

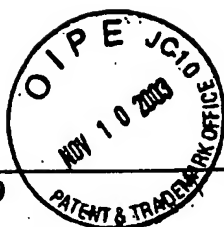
EXAMINER

/Curtis Odom/

DATE CONSIDERED

01/22/2008

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation not in conformance and not considered. Include copy of this form with next communication to the applicant.



Sheet 1 of 1

FORM PTO-1449

**INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION PURSUANT TO  
37 CFR §1.97 & 1.98**

Docket Number:	Serial Number:
4015-5090	10/672,127
Applicant:	
Bottomley, et al.	
Filing Date:	Group:
September 26, 2003	

**U. S. PATENT DOCUMENTS**

Examiner					Filing Date		
Initial	Patent No.	Date	Name	Class	Subcl	If Approp.	

**FOREIGN PATENT DOCUMENTS**

					Translation		
	Patent No.	Date	Name	Class	Subcl	Yes	No

**OTHER DOCUMENTS (including author, title, date, pages, etc.)**

/CO/	A	Lenardi, et al.; A RAKE Structured SINR Maximizing Mobile Receiver for the WCDMA Downlink; 2001 IEEE; 6 pgs.
/CO/	B	Lindoff, et al.; Channel Estimation for the W-CDMA System, Performance and Robustness Analysis from a Terminal Perspective; 1999 IEEE; 6 pgs.
/CO/	C	D'Amours, et al.; Comparison of Pilot Symbol-Assisted and Differentially Detected BPSK for DS-CDMA Systems Employing RAKE Receivers in Rayleigh Fading Channels; IEEE Transactions on Vehicular Technology, Vol. 47, No. 4, Nov. 1998; 10 pgs.
/CO/	D	D'Andrea, et al.; Symbol-Aided Channel Estimation With Nonselective Rayleigh Fading Channels; IEEE Transactions on Vehicular Technology, Vol. 44, No. 1; Feb. 1995; 9 pgs.

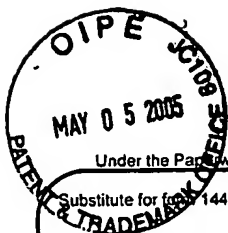
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/Curtis Odom/

DATE CONSIDERED

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PTO/SB/08B (08-03)

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/672,127
Filing Date	September 26, 2003
First Named Inventor	Bottomley
Art Unit	2196
Examiner Name	
Attorney Docket Number	4015-5090

Sheet	1	of	1
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**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
/CO/	A	Rushforth, "Transmitted-Reference Techniques for Random or Unknown Channels," IEEE Trans. Info. Theory, vol. IT-10, pp. 39-42, Jan. 1964.	
/CO/	B	Walker, "The Error Performance of a Class of Binary Communications Systems in Fading and Noise," IEEE Trans. Commun. Syst., vol. 12, pp. 28-45, Mar. 1964	
/CO/	C	Hingorani et al., "A Transmitted Reference System for Communication in Random or Unknown Channels," IEEE Trans. Commun. Technol. vol. 13, pp. 293-301, Sept. 1965.	
/CO/	D	Stojanovic et al., "Performance of Multiuser Detection with Adaptive Channel Estimation," IEEE Trans. Commun., vol. 47, pp. 1129-1132, Aug. 1999.	

Examiner Signature	/Curtis Odom/	Date Considered	01/22/2008
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<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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